

### **REMARKS**

Claims 1-17, 19-29, 31-49 are pending.

Claims 1, 13-17, 19-23, 29, 31-33, 35-43, and 45-48 stand rejected under 35 USC §102(b) as being allegedly anticipated by Bisaro (US 5,414,894).

Claims 24, 34, 44, and 49 stand rejected under 35 USC §103(a) as being allegedly unpatentable over Bisaro (US 5,414,894) in view of Yamashita (US 3,742,318).

#### **Changes in the Specification:**

The specification has been amended to add cross-reference applications. Specifically, the specification has been amended to claim the present application as a national stage application under 35 U.S.C 371 of Patent Cooperation Treaty application serial number PCT/FR99/00187, filed February 29, 1999, which claims priority under 35 U.S.C 119 to French application 98/01061, filed January 30, 1998.

No new matter has been added.

#### **Changes in the Claims:**

Claims 46-49 have been canceled. Claims 50 and 51 have been added.

Claims 1, 13-16, 19, 23, 24, 29, 31-35 have been amended in this application to further particularly point out and distinctly claim subject matter regarded as the invention. No new matter has been added.

**Rejection under 35 USC §102(b) – claims 1, 13-17, 19-23, 29, 31-33, 35-43, and 45-48**

Claims 1, 13-17, 19-23, 29, 31-33, 35-43, and 45-48 stand rejected under 35 USC §102(b) as being allegedly anticipated by Bisaro. This rejection is respectfully traversed.

A claim must be anticipated for a proper rejection under §102(a), (b), and (e). This requirement is satisfied “only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference”; see MPEP §2131 and *Verdegaal Bros. V. Union Oil*, 814 F.2d 628, 2 USPQ2d 1051 (Fed. Cir. 1984). A rejection under §102(b) may be overcome by showing that the claims are patentably distinguishable from the prior art; see MPEP §706.02(b).

Bisaro describes that to obtain a GaAs epitaxial layer 5 of a requested thickness (FIGS. 1a-1c), it is necessary to first form a GaAs epitaxial layer 2 of controlled thickness *e* and implant this epitaxial layer. The epitaxial layer 2 prevents the spread of the dislocations towards the surface (e.g. Col. 2, lines 14-16).

In contrast, in the presently claimed invention, when using a buried layer of microcavities inside a substrate, there is no need to form a first epitaxial layer of a controlled thickness to realize the epitaxy, to implant this first epitaxial layer to obtain anchoring points or an amorphous zone, and finally to realize the desired epitaxial layer. The presently claimed invention claims that a hetero-epitaxial layer can be obtained directly on a substrate if a buried layer of microcavities is realized. Bisaro does not teach or suggest that “stresses brought to said compliant substrate are absorbed in whole or in part by the thin layer and/or the layer of microcavities.” Further, Bisaro does not teach or suggest means to absorb due to hetero-epitaxial growth.

The presently claimed invention is, accordingly, distinguishable over the cited reference. In the view of the foregoing, it is respectfully asserted that claims 1, 13-17, 19-23, 29, 31-33, 35-43, and 45-48 are now in condition for allowance.

**Rejection under 35 USC §103(a) – claims 24, 34, 44, and 49**

Claims 24, 34, 44, and 49 stand rejected under 35 USC §103(a) as being allegedly unpatentable over Bisaro in view of Yamashita. This rejection is respectfully traversed.

Under MPEP §706.02(j), in order to establish a prima facie case of obviousness required for a §103 rejection, three basic criteria must be met: (1) there must be some suggestion or motivation either in the references or knowledge generally available to modify the reference or combine reference teachings (MPEP §2143.01), (2) a reasonable expectation of success (MPEP §2143.02), and (3) the prior art must teach or suggest all the claim limitations (MPEP §2143.03). See In re Royka, 490 F. 2d 981, 180 USPQ 580 (CCPA 1974).

Applicant respectfully disagrees because the proposed combination of Bisaro and Yamashita does not describe or suggest all of the claim limitations of claims 24, 34, 44, and 49. In particular, neither Bisaro nor Yamashita teach or suggest that “stresses brought to said compliant substrate are absorbed in whole or in part by the thin layer and/or the layer of microcavities.” Further, neither Bisaro nor Yamashita teach or suggest means to absorb due to hetero-epitaxial growth.

Applicant therefore submits that the rejection based the Bisaro nor Yamashita reference is improper and should be withdrawn. Thus, Applicant submits that claims 24,

34, 44, and 49 recite novel subject matter which distinguishes over any possible combination of Bisaro and Yamashita.

**Conclusion**

For all of the above reasons, applicants submit that the amended claims are now in proper form, and that the amended claims all define patentable subject matter over the prior art. Therefore, Applicants submit that this application is now in condition for allowance.

**Request for allowance**

It is believed that this Amendment places the above-identified patent application into condition for allowance. Early favorable consideration of this Amendment is earnestly solicited. If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

Respectfully submitted,  
THELEN REID & PRIEST LLP



---

Thierry K. Lo  
Reg. No. 49,097

Dated: January 14, 2005

Thelen Reid & Priest LLP  
P.O. Box 640640  
San Jose, CA 95164-0640  
(408) 282-1810 Direct  
(408) 292-5800 Main  
(408) 278-8210 Fax